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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,642	01/26/2004	Takahiro Kawaguchi	04056/LH	9099

1933 7590 05/22/2006

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EXAMINER

TRINH, MINH N

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/764,642	Applicant(s) KAWAGUCHI, TAKAHIRO	
	Examiner Minh Trinh	Art Unit 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/17/06, 10/19/05, 11/10/05, 12/10/04, 1/22/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 2-9, line 1, "A" should be changed to:-- The --. To reflect the dependent claim formats. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear whether "a resistive layer" (claim 1, line 5) is as same as " the resistive films" (claim 1, line 10). "the resistive films (claim 1, line 9) appears to be lacks antecedent basis.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-2 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted prior Art (APA), [see specification, pages 1-2 under "the section background"] in view of Gugel et al (5074687).

APA discloses the method for making an armature including an arm holding a printing wire, and magnetic circuit forming members attached to the arm, the method comprising: a parts combining process for placing the magnetic circuit forming members on the arm (see the discussion at page 1, paragraph 3); and a welding process for welding together the arm and the magnetic circuit forming members with the resistive films sandwiched between the arm and the magnetic circuit forming members by spot welding (see page 1, paragraph 3). APA, however is silent about the use of a resistive layer of a resistive material having high electric resistance sandwiched between the arm and each of the magnetic circuit forming members. Gugel et al disclose that (see Gugel et al discussion at col. 4, lines 34-50, the use of adhesive or cement as resistivity material for thermal bonding and spot weld). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to employ the Gugel's teaching as described above onto the invention of APA for various known benefits including bonding and spot welding of the magnetic circuit forming members an associated structural member such as arm therefrom.

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5. Claims 1-2, 6 and 8 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted prior Art (APA), [see specification, pages 1-2 under "the section background"] in view of Gugel et al (5074687).

If argues that the combination references do not teach regarding a resistive layer of a resistive material having high electric resistance sandwiched between the arm and each of the magnetic circuit forming members. Regarding the above, it would have been an obvious matter of design choice to use a resistive layer of a resistive material having high electric resistance sandwiched between the arm and each of the magnetic circuit forming members, since applicant has not disclosed that these features are critical, patentably distinguishing features and it appears that the invention would perform equally well with the bonding material and/or adhesive layer as taught by the prior art references (see Gugel's discussion at col. 4, lines 35-50).

As applied to claim 2, Fig. 1 of the APA discloses the magnetic circuit being opposite to the arm (see page 1, lines 19-21).

As applied to claims 6, 8, noting Gugel et al disclose a parts forming process of different materials prior to the combining process (see Figs. 1-2).

6. Claims 3 and 5 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over APA, in view of Gugel et al and further in view of Miyazawa et al (4,802,776).

APA or Gugel as applied and relied upon above do not teach the hardening process by plating or carburizing as recited in claims 3 and 5. However, above process

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is old and well known in the art and such process is further disclosed in light of Miyazawa 's discussion at col. 8, lines 35-68, and col. 9. Therefore, it would have been obvious as to employ the above plating and carburizing process in light teaching of Miyazawa et al onto the invention of APA or Gugel in order to obtain a treated plating surface by using the available techniques.

As applied to claim 5, noting col. 9, lines 45-47 of the Miyazawa et al discloses the treatment by carburizing process.

Allowable Subject Matter

7. Claims 4, 7 and 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Trinh whose telephone number is (571) 272-4569. The examiner can normally be reached on Monday -Thursday 8:00 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mt

5/3/06


MINH TRINH
PRIMARY EXAMINER